

Claims

- [c1] A drum maintenance unit comprising:
 - a latching mechanism that releasably secures the drum maintenance unit to a media device and provides electrical contact with the media device when the drum maintenance unit is installed in the media device.
- [c2] The drum maintenance unit according to claim 1, wherein the latching mechanism provides a signal to the media device that the drum maintenance unit is properly installed in the media device.
- [c3] The drum maintenance unit according to claim 2, further comprising a sensing mechanism in electrical contact with the latching mechanism.
- [c4] The drum maintenance unit according to claim 3, wherein the sensing mechanism comprises a data device.
- [c5] The drum maintenance unit according to claim 4, wherein the latching mechanism provides a data connection point between the data device and a media device when the drum maintenance unit is installed in the media device.

- [c6] The drum maintenance unit according to claim 5, further comprising a protective layer provided between the data connection point of the data device and the media device when the drum maintenance unit is installed in the media device.
- [c7] The drum maintenance unit according to claim 6, wherein the protective layer comprises a metal mesh.
- [c8] The drum maintenance unit according to claim 7, wherein the protective layer has properties to prevent corrosion between the data device and the media device.
- [c9] The drum maintenance unit according to claim 1, wherein the latching mechanism provides an electrical ground for the drum maintenance unit when the drum maintenance unit is installed in a media device.
- [c10] The drum maintenance unit according to claim 1, further comprising a recess formed in a portion of one of the drum maintenance unit and a media device and a corresponding member on the other of the drum maintenance unit and the media device, the corresponding member being adapted to engage the recess when the drum maintenance unit is installed in a media device.
- [c11] The drum maintenance unit according to claim 10,

wherein the recess comprises an angular slot.

- [c12] The drum maintenance unit according to claim 11, wherein the angular slot comprises a V shaped slot.
- [c13] The drum maintenance unit according to claim 12, wherein the V shaped slot has a first surface that has a first dimple, and the first surface is oriented so that at least the first dimple is in contact with the corresponding member of the device.
- [c14] The drum maintenance unit according to claim 13, wherein the V shaped slot has a second surface that has a second dimple to assure that contact is made with the corresponding member of the device.
- [c15] A drum maintenance unit comprising:
 - a positioning mechanism that properly positions the drum maintenance unit to a media device and provides electrical contact with the media device when the drum maintenance unit is installed in the media device.
- [c16] The drum maintenance unit according to claim 15, wherein the positioning mechanism provides a signal to the media device when the drum maintenance unit is properly installed in the media device.

- [c17] A method of installing a drum maintenance unit in a media device comprising:
- releasably securing the drum maintenance unit to the media device in a desired position; and
 - simultaneously providing an electrical connection between the drum maintenance unit and the media device.
- [c18] The method of installing a drum maintenance unit according to claim 17, wherein releasably securing the drum maintenance unit in a desired position comprises aligning a roller of the drum maintenance unit with a corresponding portion of the media device.
- [c19] The method of installing a drum maintenance unit according to claim 18, providing an electrical connection comprises providing a data connection between the media device and the drum maintenance unit.